

E72-10107
CR-128156

Type I Progress Report

ERTS-A

a) Title: Near Real Time Water Resources Data
for River Basin Management
ERTS-A Proposal No. MMC #190

b) GSFC ID IN340

c) Statement of any problems impeding the investigation

In the area of image analysis, only two cloud obscured ERTS images of the extreme northern end of the Delaware River basin have been received from NDPF. Image analysis will proceed as good imagery becomes available.

In the area of Data-Collection-System (DCS) equipment testing, there have been several technical problems encountered, all of which either have been solved or will be solved very soon. There were some problems setting up the first platforms we received. However, in all but two cases the difficulty was the result of our inexperience with the Data Collection Platforms (DCP). In one case a GE technician opened up a DCP (ID 6124) and "tweaked" it once to get it started. It has worked flawlessly ever since. In the second case a DCP antenna was defective. We have also had several minor problems with wiring the DCP's to our instrumentation. All the problems have been isolated and are soluble. Finally, the unavailability of more cables to hook the DCP's to our instrumentation should be resolved in a week or two.

(E72-10107) NEAR REAL TIME WATER RESOURCES DATA FOR RIVER BASIN MANAGEMENT Progress Report, 1 Jul. - 31 Aug. 1972 R.W. Paulson (Geological Survey, Harrisburg, Pa.)
7 Sep. 1972 5 p

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Unclas
CSCL 08H G3/13 00107

There have been a few problems at the NASA data processing end of the DCS experiment. I have had excellent cooperation from GSFC and GE people on overcoming these problems which include (1) a flaw in the DCS computer card format, (2) availability of post-ERTS-pass DCS data in real time from GSFC to the Philadelphia Current Records Center, and (3) the format of DCS data cited in (2) above. NASA and GE are straightening out these problems as they debug their system. I am confident they will be corrected in the next several weeks.

d) Discussion of accomplishments

All ten DCP's received to date from GE have been tested in the field or in our electrical shop, and all apparently work well. Nine DCP's have been field installed to date and eight are working. The ninth DCP will be functioning when a vandalized antenna cable is replaced. The tenth DCP is to be field installed in the next several days.

e) Scientific results

The DCS on ERTS has been tested and apparently is working to the system specifications. We have successfully tested DCP's under a variety of field conditions. In one location much of the sky is obscured by two spans of the Delaware Memorial Bridges. In another location the DCP antenna is mounted inside a wooden and slate roofed building. At both locations DCP communication with ERTS has been achieved. When the problems cited in (C) above are solved, I anticipate being able to meet our objective of providing near-real-time data to water resources agencies in the Delaware River basin.

(Category 4k)

- f) Published articles - None
- g) Recommended operational changes - None
- h) Changes in Standing Order forms - None
- i) ERTS Image Descriptor forms - None
- j) History by date of changed Data Request forms - None
- k) Status of Data Collection Platforms
(See attached)

DELAWARE RIVER BASIN
EARTH RESOURCES TECHNOLOGY SATELLITE
DATA COLLECTION SYSTEM EXPERIMENT
DATA COLLECTION PLATFORM STATUS REPORT

SEQUENCE NUMBER	STATION NAME	DCP-ID (OCTAL)	STATUS
1 (QW)	SHIP JOHN SHOAL LIGHTHOUSE	_____	_____
2 (QW)	DELAWARE RIVER AT REEDY ISLAND	<u>6124</u>	<u>Platform OK</u>
3 (QW)	DELAWARE RIVER AT DEL. MEM. BR	<u>6332</u>	<u>Platform OK</u>
4 (QW)	DELAWARE RIVER AT CHESTER	<u>6344</u>	<u>Platform OK</u>
5 (QW)	DELAWARE RIVER AT PIER 11, PHILA.	_____	_____
6 (QW)	DELAWARE RIVER AT TORRESDALE	_____	_____
7 (QW)	DELAWARE RIVER AT BRISTOL	_____	_____
8 (QW)	DELAWARE RIVER AT TRENTON	_____	_____
9 (QW)	DELAWARE RIVER AT EASTON	<u>6331</u>	<u>Platform OK</u>
10 (QW)	LEHIGH RIVER AT EASTON	<u>6306</u>	<u>Platform OK</u>
11 (QW)	DELAWARE RIVER NR EAST STROUDSBURG	<u>6030</u>	<u>Antenna cable vandalized</u>
12 (QW)	SCHUYLKILL RIVER AT BELMONT	_____	_____
13 (SW)	DELAWARE RIVER AT MONTAGUE	<u>6116</u>	<u>Platform OK</u>
14 (SW)	DELAWARE RIVER BELOW TOCKS ISLAND	<u>6223</u>	<u>Platform OK</u>
15 (SW)	DELAWARE RIVER AT TRENTON	_____	_____
16 (SW)	LEHIGH RIVER AT BETHLEHEM	_____	_____
17 (SW)	SCHUYLKILL RIVER AT _____	<u>6115</u>	<u>Platform OK</u>
18 (GW)	SALEM CITY NUMBER 1	_____	_____
19 (GW)	PENNS GROVE NUMBER 24	_____	_____
20 (GW)	SHELL CHEM. DO. NUMBER 5	_____	_____
	TEST	<u>6343</u>	<u>Platform OK</u>

DATE September 7, 1972

INITIALS RWP

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NEAR REAL TIME WATER RESOURCES DATA FOR RIVER BASIN MANAGEMENT 1/

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7 September 1972

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